

Amendments to and/or listing of the claims:

A listing of the entire set of pending claims (including amendments to the claims) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently amended) A method of providing bandwidth fairness in a wireless network ~~that includes a plurality of wireless stations~~, the method comprising:

determining bandwidth requirement for a particular service interval for each of ~~the a plurality wireless stations in a network~~;

determining an allocated transmission time for each of the ~~plurality of~~ wireless stations based on a ~~set minimum~~ physical transmission rate; and

fragmenting a packet ~~by~~ of at least one of the wireless stations if the at least one wireless station transmits at ~~a other transmission rates-rate~~ that ~~is lower are less than~~ the ~~set minimum~~ physical transmission rate.

2. (Currently amended) A method as recited in claim 1, wherein the allocated time for each of the plurality of wireless stations is ~~the~~ proportional to the quantity of ~~date~~ data to be sent by the respective stations during a service interval.

3. (Currently amended) A method as recited in claim 1, wherein for each of the at least one wireless station a number of the fragments is equal to the ~~set minimum~~ physical transmission rate divided by the ~~lower respective other~~ transmission rate.

4. (Currently amended) A method as recited in claim 1, wherein the allocated transmission time is equal to the total data of all packets generated in the beacon interval divided by the ~~set minimum~~ physical transmission rate.

5. (Original) A method as recited in claim 1, wherein the wireless network is a multiple physical transmission rate wireless network.

6. (Original) A method as recited in claim 5, wherein the wireless network is a Generalized Packet Radio Service (GPRS) network.

7. (Currently amended) A method as recited in claim 5, ~~where in~~wherein ~~the~~ wireless network is a Wireless Local Area Network (WLAN).

8. (Currently amended) A method as recited in claim 1, wherein each of the at least one wireless stations transmits all remaining fragments after all wireless stations that transmit at the ~~set minimum~~ physical transmission rate have completed transmitting their packets.

9. (Currently amended) A method as recited in claim 8, further comprising maintaining a particular quality of service QoS for each of the wireless stations that maintain transmission at the ~~set minimum~~ physical transmission rate during a service interval.

10. (Currently amended) A method as recited in claim 1, wherein each of the at least one wireless stations transmits all remaining fragments until its physical transmission rate is greater than the ~~set minimum~~ physical transmission rate.

11. (Currently amended) A wireless network, comprising:
at least one access point; and

a plurality of wireless stations, wherein in each service interval, the access point allocates a transmission time for each of the wireless stations based on their transmission requirements at a ~~set minimum~~ physical transmission rate that is fixed for the service interval such that each of the wireless stations transmits at the set physical transmission rate, and wherein if a wireless station transmits at a transmission rate that is lower than the set physical transmission rate during the service interval, the wireless station fragments a packet.

12 – 13. (Cancelled)

14. (Currently amended) A wireless network as recited in claim ~~[[12]]~~ 11, wherein ~~[[a]]~~ the number of fragments is equal to the lower transmission rate divided by the ~~minimum-set~~ transmission rate.

15. (Currently amended) A wireless network as recited in claim 11, wherein the transmission time is equal to the total data of all packets generated in the beacon interval divided by the ~~minimum-set~~ physical transmission rate.

16. (Original) A wireless network as recited in claim 11, wherein each of the plurality of wireless stations is adapted to transmit at multiple physical transmission rates.

17. (Original) A wireless network as recited in claim 16, wherein the wireless network is a Generalized Packet Radio Service (GPRS) network.

18. (Currently amended) A wireless network as recited in claim 16, ~~where~~ in wherein the wireless network is a Wireless Local Area Network (WLAN).

19. (Currently amended) A wireless network as recited in claim ~~[[13]]~~ 11, wherein a particular quality of service (QoS) is maintained for each of the plurality of wireless stations that transmit at the ~~minimum-set~~ physical transmission rate for the entire service interval.

20. (Currently amended) A wireless network as recited in claim ~~[[13]]~~ 11, wherein each of the wireless stations that change their transmission rate to a lower transmission rate than the ~~minimum-set~~ physical transmission rate during the service interval send their remaining fragments after all wireless station that transmit at the ~~minimum-set~~ transmission rate have completed transmission of their respective packets.